

AUTOMATED TRUST NEGOTIATION

ABSTRACT

5 Distributed software subjects face the problem of
determining one another's trustworthiness. The problem
considered herein is managing the exchange of credentials
between strangers for the purpose of property-based
authentication and authorization when credentials,
10 authenticating properties of the subject, are sensitive. An
architecture for trust negotiation between client and server
is presented. The notion of a trust negotiation strategy is
introduced with respect to an abstract model of trust
negotiation. Two strategies with very different properties are
defined and analyzed. A language of credential expressions is
described, with two example negotiations illustrating the two
negotiation strategies. Ongoing work on policies governing
credential disclosure and trust negotiation is disclosed.